

ABSTRACT

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The present invention comprises a full mesh optical interconnect with redundant power distribution conductors. The interconnect in a preferred form of backplane provides a set of optical transmission guides and power distribution conductors such that each circuit board assembly within a system can directly transmit data to any and all other circuit boards within the system and such that each circuit board assembly is provided with power from a centralized source such as the -48v battery subsystem provided by most central switching offices. A modified interconnect in the form of a midplane is disclosed.